

Martin

CRANBERRY GLADES
OF POCAHONTAS COUNTY.

The Cranberry Glades are located in Pocahontas county about twenty miles from the Virginia border in a depression among the Yew Mountains. The glades are a former bog or swampy region which has been caused by the raising up of the mountains about them and from the water seepage which seems to have been fairly great. The glades, at an elevation of 3,400 feet, lie between Black Mountain on the East, Cranberry Mountain on the South and Kennison Mountain on the Southwest. Recently CCC boys built a road into the heart of the Glades off State Route 39 about five miles west of Mill Point on U. S. Route 219.

Cranberry Glades is the largest and most widely known glade area in West Virginia. There is another glade region in Preston county but it is not nearly as large as this one in Pocahontas county.

The vegetation, here, is characteristic of a region of the latitude of Southern Canada. This is probably due to the fact that in the travel of the ice sheet southward seeds from these northern plants were carried southward. Several other factors may have contributed to the placing of different plants in this region, such as streams, the wind, migratory birds, and man. These plants established themselves in the Glades because the soil here was characteristic of their natural habitat.

This region is drained by Cranberry and Cherry Rivers. Cranberry River has its head waters in Cranberry and Black Mountains with small streams emptying into it all along its course. Cherry River has its head waters in the Yew Mountains on the north. All these streams drain this region known as the Glades.

The plants characteristic of the Glades are: Cranberries, hawthorns, moss-lichens, orchids, Southern Chain Fern, Sundew, Bog Rosemary and other swamp vegetation. In these glades are found two types of Cranberries both of which are edible in variety, and of the same species as those in the bogs of Massachusetts which are used commercially.

The Cranberry gives name to the bogs or Glades. There are several trailing species of the family (Vacciniaceae) genus (oxycoccus) but only two are found in the glades of Pocahontas county, they are smaller (O. oxycoccus) and larger (O. macrocarpus). Both are trailing vines bearing small evergreen leaves which are dark and shining above, glaucous below, revolute at the margin, ovate, lanceolate or elliptical in shape and not more than a half inch long. The inconspicuous flowers which appear in May or June, are small and stalked, having a four-lobed, rose-tinted corolla, purplish filaments and anther-cells forming two long tubes. The globular or pyriform fruits or berries

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borne on slender curved stalks, which suggested the name crane-berry, the neck of a crane, are about the size of currants, crimson in color, often spotted and have an acid or astringent taste.

Although the larger variety is the one that is cultivated and used commercially the smaller is considered to produce finer flavored fruits.

The cranberries prefer swampy or marshy soil, rich in peat and that is one reason we find cranberries in what is known as Cranberry Glades in Pocahontas county. Sphagnum, a genus of the mosses, furnishes the peat. The land must be well drained and we find that many small streams rise in these glades and flow west or south to Cranberry or Cherry Rivers.

Sphagnum, a genus of the mosses found in this region is of the family Sphagraceae and grows in moist places or bogs forming a soft, thick carpet, saturated with water. These are perennials of feathery aspect, growing at the top of the stem from year to year. Some of the numerous branches grow upward and form tufts at the apices of the stems, while others droop downward and envelope the lower portion of the stem. Each year one of the side branches grows so strongly as to rival the main head, and thus gives a forked appearance to the plant. The lower end of the stem is continuously dying away, eventually forming peat, and thus frees the lower ends of the branches, which

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thereupon start into independent plants. Special branches, differentiated by color and structure, produce the sexual organs, the two organs being on the same plant or separated. The spore-capsules are on short branches and are globular, with a lid. The small, translucent leaves, like the stem have strata of transparent cells, connected by holes, which are capable of absorbing and retaining much water. This ability to retain water has made the sphagnum moss very valuable to florists, who use it for packing bulbs and flowers, and forms a large part of the compost employed for growing pitcher-plants and orchids.

During the entire season Orchids have been found about the dryer areas of the bogs and its presence is also made possible by the growth of sphagnum-moss. These monocotyledonous plants of the order Orchidaceae of which there are more than 12,000 known species and many thousand varieties are by far the most interesting order of plants of the entire vegetable kingdom because of the extraordinary mode of growth and existence, their great age and endurance, their curious habits and varied forms of their flowers, which are distinct from all other plants, fine in texture and of glowing and exquisite colors. They are remarkable also because of their ready adaptability and free permission of cross-breeding or cross-fertilization. This is true of them in their natural habitat as well as under practical cultivation. This fact accounts for the almost endless varieties of flowers and colors.

(More will follow)

5
11 Crumbly Seeds
These plants have queer small seeds sometimes millions in a capsule; reproduction was unknown to science for hundreds of years, now these plants are known to sprout only in the presence of certain fungi. ✓

The flower is made up of several parts which include: sepals, petals, labellum or pouch, and column or crest, resting upon the modified hollow ovary, and bearing the one or two stamens and the two or three stigmas. The pollen-grains are aggregated into peculiar pollen masses. The structure of the flower is a modification of the typical three-part pattern of the lilies. Four or five out of the six original stamens of the flower are suppressed also one of the stigmas is suppressed. The labellum, which is a modified petal, is as a rule the most conspicuous part and is the most wonderfully constructed as well as the most important organ of the flower. It is through the labellum that insects, when in search of sweet nectar stored inside the spur or walls of the flower are attracted and guided to it and thus accomplish the benefits of cross-fertilization. It is in this way that so many new varieties, "natural hybrids" are produced by the unconscious work of insects.

Oreids, which are distributed over a large area of both the Eastern and Western hemispheres are divided into two general groups---the East Indian and the South American. These are then classified according to

their growth and subsistence, as saprophytic, epiphytal and terrestrial. The saprophytic include varieties which grow in wet and marshy places and are of little value except for botanical purposes. The epiphytal group which is by far the most valuable and most important grows and thrives best upon trunks or limbs of trees in mid-air simply clinging to a single stem or small limb. It is this group, too, which contains the most beautiful and most valuable species and varieties and the most varied colors.

The terrestrial orchids, as their name indicated are such as grow upon the ground and have no need for the pseudo-bulbs or hypertrophied stems, which are peculiarly characteristic of the epiphytal group. It is the saprophytes and terrestrial groups that we find in the United States. Those found in Cranberry Glades probably belong to the saprophytes class as this region is marshy.

The Grass Pink (*Calopogon pulchellus*) and the Snakemouth Orchid (*Pogonia ophioglossoides*) are fairly abundant, here, and when in bloom, the lovely rich colors of their flowers contrast them with the somber hues of the background of mosses and lichens. A few of the plants of the Yellow-fringed-Orchid are found here but the burnt-orange hue of the ragged flowers, borne on splendid spikes soon attracts the attention of those who have the good fortune to visit this region during the blooming season. Another orchid of this glade, exceedingly rare in this

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state is the little Twayblade (*Listera Smallii*). This two-leaved dwarf, so small and delicate and hidden away beneath other plants, is likely to remain invisible to all eyes except those trained and alert for the perception of unusual plant forms. Its flowers are few, tiny and a dark purple in color.

Moss-lichen is a combination of moss and lichen. The moss (*mūsci*) is a flowerless plant often growing on rocks and in moist places. They help to retain the water supply. Under favorable conditions the life of a moss plant seems to be endless. The male reproductive organs, anther-
ida, are club-shaped and contain cells which afterward develop into antherozoids, these when liberated move about until they come in contact with the female reproductive organ, archegonium. The fertilized archegonium is then carried upward on a slender filament or seta, and now forms the fruit or capsule, usually closed by a lid. When ripe the capsule opens and liberates the spores. The capsules of many species being small sacs at the end of hair-like stalks, which rise in great numbers from a moss cushion. These capsules contain spores from each of which when sown there grows in a few days a tiny plant, the protonema a class of cryptogamous plants forming with the liverworts the group Muscinæ or Bryophyta. New ones are continually springing from old shoots, so that in bogs the tops remain growing while the under-layers die and the deeper ones slowly change into peat.

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The lichens, a fungus, attaches itself to the moss in Cranberry Glades forming what is commonly called moss-lichen but is rightly lichens as they are double plants, each made up of an intimate combination of alga and a fungus. The alga furnishes the food and the fungus protects the alga against the sun's rays and absorbs water. Lichens in many places form encrusting growths on rocks and stones, on the stems and branches of trees, on walls and fences and on the earth. They are common in every zone and in all altitudes. They propagate by spores developed in various ways from the component fungus, but with these the partner alga must be speedily associated. Another frequent mode of multiplication is by means of bloodbuds, which consist of a few algal-cells plus a separated portion of the fungus. The fruits of these are known as apothecia. The lichens of which there are 4,000 known species may be grey, yellow, brown, greenish, blue, or black and have neither roots or stems but have layers of variously shaped expansions called thalli. These plants not only make their chosen places of abode more beautiful, but they help pave the way for other forms of life. Growing as they do upon exposed rocks and in barren soil they secrete an acid which dissolves the rock and softens the soil, and in time when they decay and mix with the soil, they enrich it so that more highly-developed plants can grow there.

(MORE TO FOLLOW)

Inventory of Materials

Pocahontas

Topic: Flora U. Va.

Title: Cranberry Gladiolus

Author: Florence Schumm

Date Submitted: _____ Length: 7/5 Words

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A article from Charleston Gazette
Sunday Aug. 15, 1937

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Reprints

CRANBERRY GLADES.

"Hidden away in the mountains near the western border of Pocahontas county, readily accessible from Richwood, W. Va., lies a bit of strangely fascinating country, the Cranberry Glades. Ever since the discovery of this interesting region, its natural features have attracted the attention of hunters, fishers, botanists, geologists, ornithologists and naturalists of every sort. The Glades proper and the adjoining mountain slopes comprise an area of some 300 acres. The entire section is remote, all in a semi-wild state, away from motor highways and all business and social centers.

"Reaching this isolated wonderland, one finds mute but unmistakable evidence of the relatively recent history of this region, a once magnificent spruce-birch forest destroyed by lumbermen some 30 years ago. The area is now (according to Dr. P. D. Strausbaugh, of the biological department of West Virginia university, one of the best authorities on the Cranberry Glades, who has visited and studied its flora and fauna) occupied by fire cherry, rhododendron and brambles with a liberal admixture of spruce and birch seedlings, all cooperating to lay the foundation of another forest. Decaying stumps and moss covered trunks lying where they fell, still reveal something of the luxuriant forest that stood there in previous generations.

"Orchids grow wild in the Cranberry Glades. Stories are told that from 27 to 77 different species are found. Scientists who have studied plant life there, however, say there are but three different species.

"Dr. Strausbaugh in his article relates: 'Orchids were abundant but only three species were represented. The beautiful blossoms of the snake-mouth orchid (*Pogonia ophioglossoides*) and those of the grass pink (*Calopogon pulchellus*) gave a lively touch to the somber color scheme, standing out like roseate gems against a dull background.

"The Glades are filled with bird life. Visitors, both scientists and laymen, have expressed the belief that every tree and bush has its quota. The woodland is made bewitching by the warblers. Dr. Strausbaugh states: 'The

erry Glades.

of the Veery and the hermit thrush were heard frequently and there certainly can be no music on earth or in heaven more pleasing or expressive than that of the hermit thrush...

"Scientists explain that the formation was probably at one time a lake with deeps and shallows, gradually filling up as vegetation decayed. This explains why some of the glades are more advanced than are others and explains why there is an elevation in the midst of the glades called an 'island' on which there is still virgin timber, void of shrubs and brambles making what appears to be well kept picnicking grounds.

"Recently the federal government has acquired this entire region as a part of the Monongahela National forest. The Cranberry Glades, named from the two species of cranberries that are common in this area, is being improved as a wild-life sanctuary. Thus protected against commercial invasion this area is insured an indefinite period of reforestation and protection of its natural charms and interest for succeeding generations.

"The Glades can now be reached readily, in good weather, through Richwood, by use of forest trails, over which automobiles can pass by arrangements with the United States forest service, with very little inconvenience. The route carries the tourist or other visitor a short distance up the North Fork of the Cherry river, thence over the divide into the Cranberry river valley. Beautiful, rugged natural scenic wonders unfold themselves along an almost perfect water grade route, winding along the Cranberry, past beautiful Camp Woodbine, and past the C.C.C. camp at Cranberry. This route passes 'Dogway' an old lumberjack's landmark, and all along the route may be seen the ruins of former lumber camps, the railroads and log roads which first penetrated this vast area of which within a radius of approximately one hundred miles. Richwood is the largest populated center.

"Under construction now, is the 'Missing Link' of route 39 which, when completed, will give an almost perfect water grade crossing of this area to a junction with the Seneca trail at Mill Point, into the Greenbrier river valley. When

Inventory of Materials

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Pocahontas

Topic: _____ W. Va.

TITLE:

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A newspaper clipping

Date Submitted: _____ Length: *375* Words

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Contents:

now open by CCC for tourist travel

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Attending Convention

Mr. and Mrs. William E. Harmon, William H. Field and R. O. Mills left yesterday for Columbus, O., where they are to attend a convention of stamp collectors.

Having a surplus of feature motion pictures, Argentina may have some.

To Hold Meeting Monday

The Kanawha county Republican women's club is to meet at eight o'clock Monday evening in the city council chamber.

An executive board meeting has been called for 7:30 o'clock, prior to the general club meeting, by Mrs. S. E. Beckwith, president.

Cranberry Glades Now Open By CCC For Tourist Travel

Enrollees of CCC company 525 have opened up the famous Cranberry Glades, West Virginia's scenic wonder to tourist travel, having completed a road from Richwood through the glades, and on to Marlinton, a region heretofore a veritable wilderness.

Here, a strangely misplaced trace of Arctic tundra in Pocahontas county, has been recently added to the Monongahela national forest. The CCC camp located 16 miles from this national wonder is commanded by Capt. Charles L. Calhoun.

Cranberry Glades is situated in high region of western Pocahontas county and is drained by hundreds of clear mountain brooks that flow into the Cranberry, the Elk, the Gauley and Williams rivers. It is overgrown with a dense undisturbed forest and abounding in game. It was known as the "Wilderness of Pocahontas county".

Has Over 300 Acres
There is in reality only one glade, containing some 300 to 400 acres of deep, wet soil overgrown in some places with a thicket of shrubbery and in others carpeted with lichens, mosses and sedges. Within the glade there are five open spaces, the largest is about 85 acres. Each open space is separated from the others by winding and sluggish streams which are bordered by fringes of alders, hollies and other shrubs.

Never-ending sources of delight are the 2,000 varieties of orchids which bloom in colorful contrast upon the metallic sheen of the moss carpet. As many as 32 orchids in a square foot have been counted. The buck bean, which blossoms nowhere else so far south, presents a wonderful sight when its beautiful flower of greenish-white opens in May.

Plant Life Abundant
There is, perhaps, no area of

equal extent in West Virginia which is declared of greater importance for its influence on water flow, nor one more interesting to the student and collector on account of its varied forms of plant and animal life than this glady region lying in an elevation of 3,400 feet above the sea and surrounded by mountains which rise from 1,000 to 1,500 feet above it. Natives call them quaking bogs for the ground quivers and shakes for rods around when you walk on it. This is because of the top carpet of mosses rest upon soft mire about 20 feet deep. The flat-footed bears walk across it unafraid but cattle and the cloven-footed deer avoid it as a place possessed.

On orders of Brig. Gen. William K. Naylor, commander of the fifth corps area, 27 reserve officers have had their tour of duty with the CCC extended for a period of six months beginning Thursday. They are:

Capt. Raymond Colton, Engr-Res, Glenn avenue, Capt. Vernon K. Sevy, inf-res., Greenbrier street, First Lieut. Luther J. Dempsey, engr-res., Lewisburg, and First Lieut. Marvin P. Hooker, engr-res., Wheeling.

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...convention
...the past has been
...The members
...public health service are
...the adoption of
...the control of
...diseases that prom-
...the desired results. In
...to obtain these results, the
...will have to disband from
...the old, antiquated,
...practices and accept
...recommendations for a new
...method.

One of the best illustrations is
the so-called "sanitary drinking
fountains" in our school buildings
that are nothing more than disease
spreaders. The safe method is the
individual cup or a fountain no
constructed that no child can put
their mouth on the spigot. The
fact is that no one should put any-
thing in their mouth that has re-
cently been soiled by the discharges
from the mouth of another person,
unless the same has been thorough-
ly sterilized by boiling or immer-
sion into a weak alkali solution.
Disease-producing germs always
affect those who are lacking in re-
serve force or resistance, for that
reason, the Public Health service
is insisting on every person being
taught how to acquire and increase
reserve force and resistance. This
is done by strict adherence to rules
of personal hygiene. The two most
important ones to be taught are nu-
trition and how to obtain it; post-
ure and how to practice it.

In addition to this, we have what
is called artificial immunization
whereby we can artificially increase
the resistance in individuals against
at least three specific diseases. The
administration of typhoid vaccine to
prevent typhoid fever, toxoid or its
equivalent to prevent diphtheria,
and the vaccine virus to prevent
smallpox, has given such excellent
results that it needs no further
support or comment other than to
be administered in the proper way.
It is claimed by health officials
that neither wholesale immuniza-
tion or sanitation will insure against
any attack. It requires a combina-
tion of the two. The administer-
ing of artificial immunization is
recommended for all people within
the age limit until such time when
the public will understand and
practice proper sanitation, then arti-
ficial immunization will not be so
necessary.

The greatest hindrance to the de-
sired results obtainable from the
proper administration of public
health service is that there are a
small number of people who feel
they know and proceed to give
other false instructions which are
not conducive to proper results. It
is much better to have health in-
structions given by trained health
personnel.

Much Accomplished in 1935
During the year 1935 just closed,
we have every reason to be proud
of what has been accomplished. If
we should compare it with condi-
tions seven years ago, Typhoid
fever is not more than one third
as prevalent, diphtheria has been
reduced to the small children in
isolated at the very important who
require observation, statistics is a
downside of the past and has been
for five years. For the first time
since the inauguration of the Com-
munity Health Unit, we did not have a
case of infantile paralysis (polio-
myelitis) within our jurisdiction.
For the past five years we have
been... the general health, rate is
... five percent less than
... years ago. I have death
... and one third per-
... and tuberculosis around
... work has been
... people all over
... and bar hygiene
... and other
... into the state

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four hundred percent on dry goods and groceries during the period 1822 to 1845.

During the winter 1852 almost all of the business, part of the town was destroyed by fire. During the Civil War it was burned by Federal troops, sent from Beverly, to present it being a Confederate depot for military supplies.

After the war it again grew into an important little town. Flourishing stores were operated by Amos Barlow. Lourey and Son, Lourey and Doyle. Improved methods of farming were adopted and the town took on a more pleasing appearance than ever before.

One of the principals hotels was operated by J. Williams, John Bussard, John Holden, Porterfield Wallace, I. C. Carpenter and E. Campbell in succession, but was burned by federal troops during the Civil War.

Salooning was for many years a flourishing business but in 1848 licenses for salooning was refused by the Court. This of course did away with saloons in the county.

Blacksmithing was also an excellent business as there was much horse shoeing and wagon repairing to be done. Finleys' shop stood near the Cummings Creek road and from three to four hands were employed. Another shop was operated by Jack Tidd., Later by William Dilley, a very skilled artisan; and G. W. Ginger in succession. (Though Ginger was not there until after the war)

For many years a thriving business was carried on in the harness and saddle business. First by John Haines who employed four or five hands. After by William Fertig, and later by William Grose and Son.

Tailoring was also a thriving business. Messers Campbell, John and James Holden employed several men and were kept busy during early fall and winter or when weddings were in prospects. Weddings also gave the saddles a good trade. It was considered good form for the bride to have a new outfit, horse, saddle and bridle. The groom would not think he had much chance of success if he did not do his courting on a new saddle and bridle made at Huntersville.

Mantle

More About Cranberry Glades

This region surpasses all others in that it furnishes a continuous series of surprises.

It is generally known as Big Glade being in extent some three hundred acres, covered with a carpet of mosses, lichens, low shrubs presenting a multi-colored picture something like a patchwork quilt of gray, green, rose and brown. The glade itself is of an elevation of about 3,400 feet while the mountains all about it rise to about 4,000 feet.

Many species of plants are found here, Buckbean (*Menyanthes trifoliata*), bog rosemary (*Andromeda glaucophylla*), sundew (*Dorsera rotundifolia*), Orchids abound (Three species represented), large fruited juneberry (*Amenchier Canadensis*), wild raisin (*Viburnum cassinoides*) and mountain holly (*Ilex monticola*).

On the margin of this large open glade is a well-defined zone of sedges, dulichium and carex. Back of the sedges is a continuous belt of alders beneath which we find aquatic grasses and other herbeceous plants and others such as Skunk Cabbage (*Symplocarpus foetidus* of gray), American hellebore (*Veratrum viride*). and blue monkshood (*Asclepias uncinatum*).

Still back of the alders is the tree zone of spruce and birch with an undergrowth of American yew (*Taxus canadensis*).

There is a vigorous warfare existing between the mosses and lichens. In one place the mosses are successful and gaining ground while in another the lichens are overgrowing the mosses and steadily advancing their lines. The mosses include those species as sphagnum and polytrichum while the cladonias clearly predominate among the lichens. Lichens are found on nearly all the trees which make up plant life in the area around the glade. The falsely called "reindeer moss" (*Cladonia rangiferina*) is really a lichen, and forms rather extensive patches in Cranberry Glades. Its nearly white flowers add much to ^{? no!} the variegated color-pattern of the glade.

✓ Trailing swamp blackberry is found in abundance and its long prostrate stems bearing a profusion of glossy green leaves makes some very pretty tracings on the dull-colored carpet of lichens.

Following is a description of those plants not described in a previous paper:

The Buckbean (*Menyanthes trifoliata*) is commonly found in spongy, boggy soils and flowers about the latter part of May and early June. The plant has a procumbent stem rising to a height of from six to twelve inches and covered by the sheaths of the leaves and a creeping jointed root. The leaves are trifoliate (like those of clover), with obtuse, ovate leaflets. The flower-stalk terminates in a thyrse of white flowers, rose-colored.

outwardly. The calyx is five-parted, the corolla funnel-shaped, spreading and clothed on the inner surface with a coating of dense fleshy hairs. The fruit consists of a one-celled, two valved capsule containing numerous seed. The entire plant, the root especially, has an intensely bitter taste, and an extract of it ranks as a valuable tonic quite equal in its effects to gentian. It is said to be beneficial in intermittent fevers, gout, liver complaint, dropsy and scurvy.

Bog Rosemary, sundew, and orchids (see previous paper).

The large fruited juneberry (*Amelanchier Canadensis*) sometimes known as Service-berry, prefers dry soils and flowers from March until May. This is a large shrub or tree, usually much less than twenty-five feet in height and rarely twice that height. The oval leaves which alternate on the stem, are tapering at the tip, finely saw-edged, smooth like those of the pear tree but often hairy when young. The flowers on long, slender pedicels, in spreading or drooping racemes with silky, reddish bracts among them, are pure white and over one inch across. They consist of a five-parted, persistent calyx, five long, narrow tapering petals, three or four times the length of the calyx, and numerous stamens inserted on the calyx throat; with two to five styles,

hairy at the base, The fruits are round, crimson, sweet, edible, seedy berries which are ripe in June and July.

✓ The Mountain Holly (*Ilex monticola*)--Nemopanthes Canadensis of Gray--a shrub of the northern swamps about six feet high, and by no means confined to mountainous regions, since it is also abundant in the middle West, has smooth-edged, elliptic, petioled leaves, ash-colored bark, small, solitary, narrow-petalled staminate and pistillate flowers on long, threadlike pedicels from the leaf-axils, in May. In August dull-pale-red berries appear. The leaves are not as glossy as those of the European variety and this holly prefers swampy places.

The sedges found here are genus of *Cyperaceae* which are sometimes used in converting swamps into dry ground. These are nearly akin to the grasses but easily distinguished by their solid, unjointed, generally triangular stems, undivided leaf-sheaths, and the absence of paleae. Dry and rough in texture they furnish only the poorest constituent of fodder or hay, nor with few exceptions have they any other economic uses. The two genus found here are *Juncus* and *Carex*.

There are many alders in Cranberry Glade, one black alder or winterberry (*Ilex verticillata*) belongs

to the Holly family and flowers in June and early July. This plant is a shrub six to twenty-five feet in height with oval, saw-edged, dark green leaves tapering to a point, about one inch wide, smooth above and hairy especially along veins beneath. The small, greenish-white flowers are in clusters, the staminate clusters being two to ten flowered, and the fertile ones one to three flowered. Beautiful bright-red berries, about the size of a pea, apparently whortled around the twigs cover the branches during the late fall and early winter months. The preferred habitat of the black alder is swamps, ditches, fence-rows or low thickets.

The White alder (*Clethra alnifolia*) like the black alder prefers swampy places but it flowers in late July and early August. This much-branched shrub, grows from three to ten feet in height. The leaves which alternate on the stem, are oblong or ovate, finely saw-edged above the middle at least, green on both sides and tapering at the base into short petioles. The very fragrant, white flowers which are about one-third of an inch across are borne in long, narrow, upright, clustered spikes, with awl-shaped bracts. These flowers have a calyx of five sepals; and contain five long petals; ten protruding stamens with one style the longest.